

What is claimed is:

1. A method of minimizing the cost of using a component of a computer program, said method comprising the steps of;

5 a) providing said component with a plurality of explicit selectable alternative implementations which share a common component interface and semantics;

b) instrumenting said component to gather cost-related information during at least a partial run of said program;

10 c) providing said component with a cost estimator for using said cost-related information to estimate a cost for using each of said explicitly selectable implementations in running said program;

d) based on the costs estimated in step (c), selecting one of said explicitly selectable implementations for a subsequent at least partial run of said program..

15 2. A method as set forth in Claim 1, wherein a default implementation is used during said at least partial run.

20 3. A method as set forth in Claim 1, wherein selecting step (d) is carried out by an other component operable as a controller.

4. A method as set forth in Claim 1, wherein selecting step (d) is carried out by an application program.

5. A computer readable medium readable by a computer and including computer instructions for carrying out a method of minimizing the cost of using a component of a computer program, said method comprising the steps of;

- 5 a) providing said component with a plurality of explicit selectable alternative implementations which share a common component interface and semantics;
- b) instrumenting said component to gather cost-related information during at least a partial run of said program;
- 10 c) providing said component with a cost estimator for using said cost-related information to estimate a cost for using each of said explicitly selectable implementations in running said program;
- d) based on the costs estimated in step (c), selecting one of said explicitly selectable implementations for a subsequent at least partial run of said program..

6. A computer readable medium as set forth in Claim 5, wherein a default implementation is used during said at least partial run.

20 7. A computer readable medium as set forth in Claim 5, wherein selecting step (d) is carried out by an other component operable as a controller.

8. A computer readable medium as set forth in Claim 5, wherein selecting step (d) is carried out by an application program.

5 9. A computer program comprising a plurality of components which interact during running thereof, at least one of said components comprising:

a) a plurality of explicit selectable alternative implementations;

b) a common interface and semantics for receiving messages from an other one of said components and sending messages thereto;

10 c) an instrumentation for gathering cost-related information during at least a partial run of said computer program;

d) a cost estimator for using said cost-related information to estimate a cost for using each of said explicit selectable alternative implementations; and

15 e) a selector for choosing one of said alternative implementations in response to a message received at said interface from one of an application program and an other one of said components.

20 10. A computer program as set forth in Claim 9, wherein one of said alternative implementations comprises a default implementation which is operational before operation of said selector.

11. A computer program as set forth in Claim 9, said selector being operable to
choose an alternative implementation based upon a cost measurement by said
instrumentation.

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